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RECENT DEVELOPMENTS IN TELEPHONE SERVICE IN
THE UNITED STATES

COMMUNICATIONS DIVISION
JANUARY, 1986



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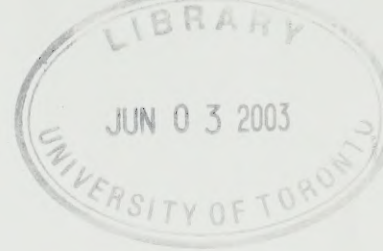


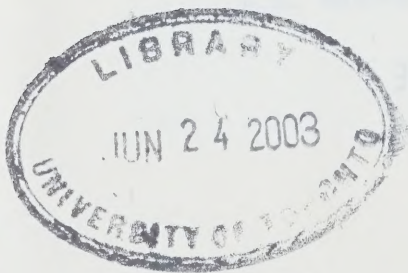
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I. EXECUTIVE SUMMARY

This paper describes the long distance telephone business in the United States and discusses recent developments in that industry. The paper outlines the regulatory environment in which the companies must operate. The allocation and recovery of costs, a critical issue in the pricing of telephone services, is also discussed at some length. The impact that recent developments have had on telephone rates is described and the current market structure and the important issue of bypass are discussed.

The purpose of this paper is to provide information on recent developments in the telephone industry in the U.S., particularly those relating to competition in the provision of long distance telephone service. The situation in the U.S. is not identical to that in Canada but there are sufficient similarities such that knowledge of the U.S. experience can be put to good use in Canada.

The key points, discussed in detail in the body of this paper, are:

Competition

- Competition in the provision of long distance telephone service is not an issue in the U.S. It exists and will continue to exist.
- Competition in the provision of long distance telephone services has not caused any significant changes in the pricing structure of telephone services.

- The number of companies providing long distance service will decrease, but it will remain a competitive market.

Telephone Pricing

- The question of how much each telephone service should contribute to Non-Traffic Sensitive (NTS) costs is a serious issue in the U.S.
- The amount of contribution that a particular service makes to NTS costs can have a major impact on the price of that service.
- Local telephone rates to date have not increased significantly as a result of changes in the method of recovering NTS costs.
- There is a potential that some telephone companies may be required to make substantial increases in their local rates should the FCC achieve its objectives concerning NTS costs.
- It is likely that some form of assistance will be provided to areas which would otherwise experience large increases in their local phone rates in order to maintain access to telephone service for the people in those areas.
- While there have been variations, the price of local phone service has not increased dramatically in recent years.

- The increases that have occurred in local phone rates are due to many different factors, of which some major ones are:
 - changes in depreciation rates
 - changes in allowed rates of return
 - shifting NTS costs from long distance to local
 - modernization/replacement of telephone equipment
- The pricing structure for telephone services is complex and the rationale for and effects of any proposed changes should be carefully studied before any action is taken. The U.S. experience with competition, bypass, divestiture, rate restructuring and inter-jurisdictional regulation can be useful to Canada if we draw on their successes and avoid their mistakes.

Bypass

- Bypass is a complex issue and there is significant disagreement concerning whether or not bypass is a serious problem.
- The method used to charge long distance companies for access to local telephone networks can have an impact on the extent to which bypass occurs.
- The most prevalent form of bypass today is bypass of the local telephone company through the use of private lines provided by the local telephone companies themselves.

II. INTRODUCTION

a) Background

Regular voice long distance telephone service is a competitive business in the U.S. There are several facilities-based companies and hundreds of resellers offering long distance telephone service to the public. The market has gradually and recently developed to its current status.

In Canada, regular voice long distance telephone service is not offered on a competitive basis. CNCP Telecommunications had applied to the CRTC for permission to compete with Bell Canada and BC Tel but was turned down in a decision dated August 29, 1985. CNCP, in December, 1985, filed an appeal of that decision with the CRTC. It is expected that eventually CNCP will be permitted to compete fully in the long distance market.

Of great interest are the terms and conditions under which CNCP would be permitted to offer service. Equally important are the likely impacts on local service rates and on universal access to basic telephone service at affordable rates. The U.S. situation, although substantially different in many aspects, offers information of significant value in planning and preparing for the arrival of competition in regular voice long distance telephone service in Canada.

b) Purpose of the Study

There were three main objectives of this project.

- to obtain information on the situation in the U.S. regarding competition in the provision of regular voice long distance telephone service;
- to develop contacts and sources of information on telecommunications matters in the U.S.;
- to prepare for public proceedings on this subject in Canada.

c) Methodology

The approach to the study was two-fold. An extensive review of the literature associated with the subject was conducted, and secondly a series of interviews with various U.S. telecommunications officials was held. The literature review included both material available prior to the interviews and documents received as a result of the interviews.

The success of this project was largely due to the many U.S. telecommunications officials who took time from their busy schedules to meet with us to discuss the various issues. Appendix A provides the names of these people.

III. REGULATORY FRAMEWORK

The federal government and the governments of each state are all involved in the regulation of long distance telephone service. The Federal Communications Commission (FCC) has jurisdiction over interstate long distance telephone service. Each state government has established a commission which has jurisdiction over long distance telephone service within the state and which also has authority over local telephone service in the state.

The nature of the telephone business is such that many items of equipment are used both for the provision of inter-state long distance service and intra-state long distance service. In addition, some of these equipment items are also used in the provision of local telephone service. Many of these items are such that the amount of equipment required does not vary in amount regardless of the volume of local, intra-state long distance or inter-state long distance calling. The costs associated with these items are referred to as common costs or non-traffic sensitive (NTS) costs. As these costs do not vary in relation to the amount of calling and because they are necessary for the provision of each service, there is no logical basis on which to assign the costs to one service or the other. Obviously, the costs must be recovered from all services in total so that the telephone company may operate on a profitable basis. However, the amount of contribution which each type of service makes to these NTS costs can have a significant impact on the price of that

service. NTS costs are roughly one-half of the telephone industry's total costs. The larger the contribution to the NTS costs made by a particular service the higher the price of that service.

Traditionally, long distance services have made substantial contribution to the NTS costs. The effect of recovering substantial portions of the NTS costs from inter-state and intra-state long distance services reduced the amount of NTS costs which needed to be recovered from local telephone services. This resulted in prices for local telephone services that were lower than they otherwise would have been.

Traditionally, the FCC and the state commissions have agreed on methods which arbitrarily allocated these common costs to either the inter-state jurisdiction or the intra-state jurisdiction. Further details on these allocation methods and the subsequent recovery of the allocated costs are presented in the following sections. This allocation of the NTS costs permits the identification of the total costs relevant to each jurisdiction. Each jurisdiction then sets rates for the services under its control such that the total costs are recovered. Appendix B describes the way a telephone company's total costs are divided for jurisdictional purposes.

The interdependent nature of the telephone business means that decisions taken by the FCC frequently have a significant impact on the state commissions. Generally, the FCC attempts to resolve potential conflicts before

reaching a decision. To assist it in minimizing conflicts the FCC established the Joint Federal State Board. The Board is a panel of seven people, 3 appointed by the FCC and 4 appointed by state commissions. It was established in June, 1980 to make recommendations to the FCC on matters of joint federal-state interest. Its recommendations are not binding on the FCC but are generally accepted. However, there have been occasions in which agreement between the FCC and the state commissions could not be reached and the FCC has acted unilaterally. Some of these decisions were challenged by the state commissions but the courts have upheld the FCC's authority with respect to any matter which is considered to be inter-state in nature. The FCC can and has pre-empted state authority on matters which it considers to be national in scope (e.g., setting depreciation rates for telephone equipment).

The courts have recently become a major player in establishing the rules of the game for the telephone industry in the U.S. The specific terms of the agreement between the U.S. justice department and AT&T which resulted in the "divestiture" of AT&T were established and approved by the courts. The "divestiture" involved the break-up of AT&T into seven regional companies and one long distance company. The regional companies each consist of a number of local telephone companies. The courts issued very specific rules concerning which services each company could offer and where. In addition, in an attempt to foster competition in long distance service, the local telephone companies (Bell companies only) were directed to provide access to all long distance companies on a non-discriminatory basis by December 31, 1985. GTE, when it purchased Sprint, agreed to provide equal access as well.

Each local telephone company is responsible for the provision of local telephone service within its territory. In addition, a local telephone company is permitted to provide long distance service within a Local Access and Transport Area or LATA for short but not between LATA's. The AT&T long distance company is permitted to provide long distance service but not local telephone service. The court decision divided the entire operating territory of AT&T, which was most of the U.S., into LATA's. Each LATA was an attempt to put geographical boundaries on long distance "communities of interest". The rationale for the divestiture was as follows. The local telephone companies controlled access to the telephone network. The court wanted to minimize the possibility of favouritism to that part of AT&T which handled long distance service with respect to its competitors, such as MCI. To do so it needed to clearly separate the provision of long distance service from the provision of local service. However, to minimize the potential financial harm to the local telephone companies and their customers, it was decided that not all long distance service should be removed. The selection of the boundaries for each specific LATA, of which there are 167, was an attempt to balance these conflicting objectives. Generally, a LATA is within the boundaries of one state and each state has one or more LATAs. However, there are 2 LATAs which cross state lines and there is one state which is part of a LATA.

Thus, a local telephone company may be able to provide long distance service throughout its operating territory or it may not be able to do so if its territory involves more than one LATA. Neither the FCC nor a state commission

may authorize a local telephone company to offer inter-LATA long distance service. Only the courts may do so and they do not permit it.

The FCC and state commissions can, however, authorize competition within their respective jurisdictions. The FCC has permitted competition in the provision of inter-state long distance services both by facilities based companies and by companies which simply resell the services of companies which own telecommunications facilities. The majority of states have permitted intra-state inter-LATA competition in long distance services and again have done so for both facilities based companies and resellers. Only a few states have permitted intra-state intra-LATA competition in long distance services. Currently there are some 8-10 facilities-based companies, often called "other common carriers" (OCCs), in addition to AT&T and hundreds of resellers. The provision of local telephone service remains a monopoly within the operating territory of a given telephone company. However, the number of local telephone companies within one state varies from one to many. Some states have only one while others have a mixture of a Bell company and some independents or a mixture of independents. There are approximately 1,400 telephone companies in the U.S.

The regulation of the various companies varies significantly. The local telephone companies and AT&T continue to be subject to the traditional form of regulation. Recently, however, there have been some changes to provide them with increased flexibility to

respond to competitive market conditions. The other companies in the business, often referred to as non-dominant, generally are not subject to the traditional form of regulation, and in most cases are subject to little or no regulation. Often, they simply file rates or a range of rates within which they propose to offer service to the public.

IV. ALLOCATION OF NTS COSTS

As discussed in the previous section, telephone companies have a significant amount of costs which are common and non-traffic sensitive in nature and therefore cannot be logically assigned to a particular service. However, these costs must be recovered and therefore must be allocated to the various services and built into the prices for those services.

Traditionally, the total NTS costs for a particular company have been divided between the inter-state jurisdiction and the intra-state jurisdiction. The specific method to be used for dividing or allocating these costs was negotiated between the FCC and the state commissions. In recent years each company would determine the percentage of its total long distance calling that was for inter-state purposes. This percentage was then "weighted" using a complicated procedure to arrive at what is called the inter-state subscriber plant factor (SPF). The SPF is the percentage of the company's NTS costs which are actually assigned to the inter-state jurisdiction. The weighting involved in SPFs was a factor of approximately three. In other words, the average percentage of NTS costs allocated to the inter-state jurisdiction was about three times the percentage indicated by the inter-state usage.

Since each company's percentage of inter-state calling was different, the percentage of NTS costs assigned to the inter-state arena varied significantly from company to

company. The percentage for Companies in the Bell system ranged from a low of 13 per cent to over 62 per cent. Appendix C provides the actual percentages for various telephone companies. Some independent company percentages were even higher and a limit on the amount of NTS costs which could be assigned to the inter-state jurisdiction was set at 85 per cent by the FCC.

The changes to the allocation method over the years resulted in a larger and larger percentage of NTS costs being allocated to the inter-state jurisdiction. The average percentage of NTS costs allocated to the inter-state arena rose to approximately 28 per cent in 1981 from about 10 per cent in 1965. The arbitrary nature of this process was recognized, but the parties involved accepted it and believed that the end justified the means. The effect of this process was that more and more NTS costs were charged to the inter-state jurisdiction, and consequently less to the intra-state jurisdiction. Thus, inter-state long distance rates were higher than they otherwise would have been.

The FCC, in February, 1982, froze the allocations at their 1981 levels. On December 1, 1983 the FCC announced that beginning in 1986 the percentage of NTS costs allocated to the inter-state arena would, over an eight-year period, be set at a flat 25 per cent for each company. The 25 per cent standard represented little change from the national average of about 28 per cent. However, for certain companies it represented a major change and this was the reason for the gradual introduction. In addition, it was

proposed that a fund be established to assist companies who have had extremely high allocations of NTS costs to the inter-state arena and who would have difficulty meeting the 25 per cent standard.

These changes to the method of allocation were adopted by the FCC on the recommendation of the Joint Federal State Board.

V. RECOVERY OF NTS COSTS

The recovery of the NTS costs has traditionally been accomplished in two parts. The NTS costs allocated to the intra-state jurisdiction were recovered from the rates set for intra-state services, and the NTS costs allocated to the inter-state jurisdiction were recovered from the rates set for inter-state services.

Within a state, the NTS costs allocated to the intra-state jurisdiction would be added to all the other costs of providing telephone service within the state to produce a total intra-state revenue requirement. The traditional practice followed was, and in most cases still is, to price intra-state long distance at a level which would provide a significant contribution to the NTS costs which had been allocated to the intra-state arena. The remaining costs were then recovered from the prices set for local telephone services. This approach is sometimes referred to as the residual method of pricing.

The NTS costs allocated to the inter-state jurisdiction were added to the direct costs of providing inter-state long distance services. This created a total revenue requirement for inter-state purposes and the FCC would approve uniform, nation-wide rates for inter-state calls sufficient to recover the total costs. In effect, the NTS costs were averaged over the total volume of calling. The long distance division of AT&T would collect the revenues from inter-state calls. Each operating company would then receive from the inter-state pool of revenue an amount of money equal to the NTS costs which it had assigned to the inter-state jurisdiction.

With the advent of the other Common Carriers referred to as OCCs, the local telephone companies became concerned over a possible loss of contribution to NTS costs due to inter-state calls handled by the OCCs. It was decided, despite their objections, that the OCCs should contribute to NTS costs. However, the process used by AT&T was not judged suitable for the OCCs. A complication was the fact that the type of access to the local telephone networks received by the OCCs was inferior in quality to the access enjoyed by AT&T. As a result of this, a negotiated settlement was reached and a set of tariffs called Exchange Network Facilities for Interstate Access (ENFIA) was established in April 1979. The ENFIA rates applied only to OCCs and gave them an effective discount of 70 per cent from the rates paid by AT&T. Due to the large discount and the fact that the OCCs had only a small share of the market, there was only a minimal impact on the amount of NTS costs paid by AT&T.

However, major changes to the basic nature and objectives of this process are underway. The major development leading to these changes in the process was a change in attitude by the FCC. The FCC became concerned over the impact that bypass might have on the local telephone companies and their customers. The use of private lines or private networks is referred to as bypass. Bypass is discussed in detail in a later section. The FCC became convinced that the threat of bypass made it impossible to continue to have long distance services make substantial contributions to the NTS costs. This belief led the FCC to unilaterally make changes to the methods used for the recovery of inter-state NTS costs.

The purpose of these changes was to reduce and to eventually eliminate the contribution to NTS costs that was being made by inter-state long distance telephone services.

Instead of charges to the long distance companies, the FCC in December, 1982, proposed that the NTS costs be charged directly to the customers through a flat rate per month for access. The original intent was to shift virtually all of the NTS costs to the customers. However, a political storm developed and the FCC was forced to delay and to modify its proposals.

The result was that not all NTS costs could be recovered directly from the customers. The FCC developed a set of carrier access charges which would recover the remaining NTS costs not received directly from the customers. These charges are to be paid by the long distance companies and were implemented by the FCC in May 1984, and replaced the ENFIA tariffs. The carrier access charges are based on minutes of use of the local telephone company switch and apply at both the originating and terminating ends of the call. To reflect the fact that OCCs were receiving access of a lower quality than AT&T, they were given a discount of 55 per cent from the rates paid by AT&T.

The carrier access charges are uniform and nation-wide. The charges are calculated so as to recover all of the NTS costs allocated to the inter-state jurisdiction which are not recovered through direct access charges to the customers. All local telephone companies belong to the National Exchange Carrier Association (NECA). NECA acts

as a balancing agent. Each local telephone company bills for carrier access at the national rate and also bills the customers for access at the FCC mandated rates. The total revenue received from these charges is compared to the total NTS costs which have been allocated to the inter-state arena. Any excess revenue is paid to NECA and any shortfall in revenue is remitted to the telephone company by NECA.

As mentioned above, the objective of the FCC is to shift the NTS costs from the long distance companies to the customers. In doing so it will be able to lower the price of inter-state calls and thus reduce the incentive for bypass. To achieve this objective the FCC plans to lower the carrier access charge each time the customer access charge is increased. Further, each time the carrier access charge is lowered it will order AT&T to lower its rates.

In summary, the FCC has two major objectives. The first is to set the amount of NTS costs allocated to the inter-state jurisdiction at a flat 25 per cent for each company. The second is to have this 25 per cent of NTS costs recovered directly from the customers through a flat rate per month. The overall result, if they should be successful in accomplishing both objectives, is that no NTS costs will be recovered from the rates set for inter-state telephone calls. Appendix D outlines the various methods used for recovery of NTS costs allocated to the inter-state jurisdiction.

VI. IMPACT ON TELEPHONE RATES

The impact of the FCC's proposal, to eliminate a contribution to NTS costs by inter-state long distance, on particular states and particular local telephone companies will vary substantially. The customers of all companies will face at least some increase in their local phone bills simply because of the existence of the FCC mandated customer access charge.

In addition, customers of those companies which have traditionally assigned more than 25 per cent of their NTS costs to the inter-state jurisdiction may face further increases in the rates they pay for intra-state services. The exact result depends upon the actual dollar amount of NTS costs which had been assigned in the past. If this is greater than the amount to be received by the telephone company from the customer access charges, then the company's intra-state revenue requirement will increase. Hardest hit will be those companies who have been assigning more than 25 per cent of their NTS costs to the inter-state arena and which at the same time have a high percentage of their total costs in the form of NTS costs.

While the objectives of the FCC and its preferred actions are well known, the reactions of the various state commissions are much less certain. They have no control, except, of course, political pressure, over the FCC actions concerning NTS costs in the inter-state jurisdiction. They do, however, have authority over the NTS costs allocated to the intra-state jurisdiction. The same arguments that were put before the FCC concerning bypass

are being presented to the state commissions. There is pressure to reduce or remove the contribution to NTS costs that is made by intra-state long distance calls. However, it appears that, to date, few state commissions are convinced that the threat of bypass is sufficient to warrant major changes to the pricing of intra-state long distance services. A notable exception is New York, where the commission recently announced changes in its pricing policies which would result in the shift of a major portion of NTS costs from intra-state long distance services to local telephone services.

However, the question of where to recover the NTS costs which are allocated to the intra-state arena is very much at issue. To the extent that the contribution by intra-state long distance services to NTS costs is reduced, there will be further increases in the prices of local telephone services.

To date, it appears that local telephone rates have generally not risen substantially as a result of the changes in the method of recovering NTS costs. A recent report indicated that the average percentage increase in the cost of flat rate local service in the U.S. for the years, 1982, 1983 and 1984 was 8.9%, 4.7% and 7.6% respectively. However, there is certainly a potential that sizeable increases in the cost of local service may be necessary for certain companies should the FCC fully achieve its objectives.

The FCC, while implementing customer access charges, has also taken action to reduce the price of inter-state long distance service.

In May, 1984, multi-line business customers began to pay up to \$6.00 per month per access line. The actual amount depends upon a specific company's NTS costs but cannot exceed \$6.00. The recent national average was approximately \$4.70. Single line business customers and residential customers began in June, 1985 to pay \$1.00 per month. This is scheduled to go to \$2.00 per month in June, 1986.

The FCC has said that the access charge will not exceed \$4.00 for residential and business single line customers before 1990 and the whole issue is under review. It was estimated that an average access charge of \$7.00 per line would be needed to recover all NTS costs directly from the customers.

This can be compared to an average residential phone bill for local service of \$11.00 in 1983. If the access charge were to rise to \$7.00 than the average local phone bill would be \$18.00 per month.

When the access charge for multi-line business customers was introduced in May, 1984, the FCC ordered AT&T to lower its rates by 5 per cent across the board. A similar across-the-board reduction of 6 per cent in AT&T's rates was ordered in June, 1985, when the \$1.00/month access charge for residence and single line business customers was introduced. The FCC plans to order a further reduction in long distance rates when the customer access charge rises to \$2 in June, 1986.

VII. BYPASS

Bypass is a term used by many people to mean many different things. For the purposes of this study a useful definition of bypass is "any activity which enables a customer to make long distance calls, and at the same time to avoid paying a contribution to the NTS costs of the telephone company". Bypass can occur in several ways ranging from a customer building its own network to a customer using the telephone company's own facilities to bypass the telephone company. The latter method constitutes bypass because, generally speaking, telephone services which do not use the public switching facilities are not priced to provide a contribution towards NTS costs. Bypass is a problem for two reasons. When a customer bypasses, the contribution previously made is lost and must be made up elsewhere. Secondly, if bypass involves a customer building its own facilities this may result in unused telephone plant, the cost of which must be paid for by other customers.

Bypass and the potential for bypass have existed for many years. However, the FCC's introduction of carrier access charges based on minutes of use has contributed to the potential for bypass. It is the FCC's objective, as stated earlier, to shift all the NTS costs directly to the customers to minimize the incentive for bypass. However, in the meantime, the approach taken by the FCC encourages customers to bypass using the local telephone company's private line facilities. This is because for each minute of long distance calling which goes through the telephone

company switch, the customer must reimburse the long distance company for the access charge which it pays to the local telephone company. Private line rates do not include a contribution to NTS costs. Therefore if a customer has enough total minutes of long distance calling, it is more economical for him to lease a private line from his office directly to the long distance company and to bypass the local switch. Previously, the customer had to have enough volume between a specific set of originating and terminating points to justify a private line.

Leaving aside for a moment the irony of the FCC's approach to bypass, it is clear that the extent of bypass and its potential to harm the local telephone companies is a matter of much dispute in the U.S.

There are those who believe that bypass is a serious problem. They believe that if actions are not taken to reduce and eventually eliminate contributions to NTS costs by long distance services, then bypass will increase dramatically. They also believe that a significant increase in the level of bypass will cause severe revenue losses to local telephone companies and consequently require significant increases in the prices of local services. They do not believe that long distance rates could be raised to offset the revenue losses as this would result in more bypass and more revenue losses. Shifting NTS costs from long distance services to local services will obviously result in higher prices for local services. However, the proponents of this plan believe the customers will be better off because otherwise they would face the

loss of contributions in any case, plus they would have to pay for the costs of the equipment left stranded by large customers who chose to bypass by building their own networks.

Opponents of the proposal to shift NTS costs to local telephone services do not believe bypass is as serious a problem as claimed. They believe that to the extent that bypass exists, it is a problem which can be dealt with over time. Further, they believe that the nature of bypass and the rationale for bypass need to be carefully examined. They contend that a significant amount of bypass is created by the pricing policies of the telephone companies. They consider that the number of customers who would actually build their own networks is very limited, and that if they are properly priced, long distance services can still contribute to NTS costs without creating a significant amount of bypass. They argue that in many cases customers using private facilities are still interconnecting to the public network through the use of sophisticated PBX's (private branch exchanges) owned by themselves. This access is of value to them and they should pay accordingly. A further concern of opponents is that the pricing changes favoured by the FCC may create a different problem - that of local bypass. They fear that FCC actions may raise the price of access so high that many customers will bypass the telephone company for their local service.

Bypass and the potential for bypass are difficult subjects on which to obtain conclusive evidence. Various reports provide conflicting stories. However, some facts emerge.

Bypass is a regional, not a national problem. There are some areas where bypass is much more prevalent. These are the areas where there are large concentrations of long distance calling. The rationale for bypass is two-fold - customers want services the telephone company can't deliver (reliability, security, etc.) and/or they want equivalent services at a lower cost. Very few customers replace all of their long distance calling with their own networks. For most, it is a supplement to the publicly available networks.

The most prevalent form of bypass today and for the foreseeable future is bypass of the local telephone companies through the use of private lines provided by the local telephone companies themselves.

The installation and maintenance of customer owned networks for end to end calling is a major undertaking. A customer must have a significant volume of calling between a limited number of locations to economically justify building its own network.

There is a method, which would permit local telephone companies to charge long-distance companies for access to their local network, and yet minimize the incentive for customers to bypass. This alternative, which is receiving serious consideration by certain state commissions, is to price access on the basis of capacity. The concept is that the desired amount of contribution to NTS costs would be recovered from the competing long distance companies on the basis of their relative call carrying capacities. The

amount per company may change as their market share changes, but the total contribution to NTS costs would still be recovered. The particular long distance companies would then recover the costs from their customers. This method would eliminate the requirement to shift NTS costs from long distance services to local services and thus eliminate the need to raise local rates because of this reason.

VIII. MARKET STRUCTURE

The companies which provide long distance telephone service in the U.S. can be grouped into three major categories. These three categories are facilities-based long distance companies, local telephone companies which provide long distance and resellers of long distance services.

The facilities-based long distance companies include AT&T and the Other Common Carriers (OCCs) such as, MCI, GTE and Sprint. AT&T is clearly the market leader. The OCCs set their prices below AT&T, usually a discount of 20-30 per cent, and market their services primarily on the basis of the difference in price. AT&T provides service to and from all points. The OCCs offer termination to any point in the U.S. but do not originate calls in all U.S. locations. The OCCs marketing efforts are concentrated on business customers and within that group, small and medium size customers.

The type of access to the local network enjoyed by the OCCs is, in many cases, lower in quality to that given to AT&T. Due to this difference, the OCCs pay a much lower price for access. However, the local telephone companies are making arrangements to provide similar access to all long distance companies. As this similar access becomes available, the OCCs are to pay the same rates as does AT&T. There are serious concerns by the OCCs over this development. They maintain that, for

various reasons, they still do not nor will they have equal access to AT&T and therefore should not pay the same rates. Their statement warrants serious consideration and includes factors such as equal access at one end of the call but not at the other; part of an area, but not all of it converted to equal access; and advantages enjoyed by AT&T through access to information not available to the OCCs.

There is considerable speculation whether or not the OCCs can continue to survive should they be required to pay the same rates as AT&T for access. It is quite possible that the number of OCCs will decrease over time.

Most local telephone companies offer long distance service as well. Many of these companies are restricted to offering long distance service within LATA's. The current legal and political situation does not permit them to expand their service beyond the boundaries of a LATA. A number of these companies would prefer to be able to offer long distance between LATA's - certainly within their operating territory and possibly beyond. It is possible that over time the restrictions on these companies may be relaxed - particularly if the number of OCCs declines significantly.

Resellers are companies which own no facilities but which purchase services, in bulk, from companies which provide long distance and then retail these services to the public. There are hundreds, possibly thousands, of these resellers currently operating in the U.S. They

have only a very small share of the market and this particular group of companies experiences rapid turnover. It is expected that the number of companies will decrease dramatically and that those companies which survive will be the ones which can find a "niche" in the market place.

IX. CONCLUSIONS

Competition

- Competition in the provision of long distance telephone service is not an issue in the U.S. It exists and will continue to exist.
- Competition in the provision of long distance telephone services has not caused any significant changes in the pricing structure of telephone services.
- The number of companies providing long distance service will decrease, but it will remain a competitive market.

Telephone Pricing

- The question of how much each telephone service should contribute to Non-Traffic Sensitive (NTS) costs is a serious issue in the U.S.
- The amount of contribution that a particular service makes to NTS costs can have a major impact on the price of that service.
- Local telephone rates to date have not increased significantly as a result of changes in the method of recovering NTS costs.
- There is a potential that some telephone companies may be required to make substantial increases in their local rates should the FCC achieve its objectives concerning NTS costs.

- It is likely that some form of assistance will be provided to areas which would otherwise experience large increases in their local phone rates in order to maintain access to telephone service for the people in those areas.
- While there have been variations, the price of local phone service has not increased dramatically in recent years.
- The increases that have occurred in local phone rates are due to many different factors, of which some major ones are:
 - changes in depreciation rates
 - changes in allowed rates of return
 - shifting NTS costs from long distance to local
 - modernization/replacement of telephone equipment
- The pricing structure for telephone services is complex and the rationale for and effects of any proposed changes should be carefully studied before any action is taken. The U.S. experience with competition, bypass, divestiture, rate restructuring and inter-jurisdictional regulation can be useful to Canada if we draw on their successes and avoid their mistakes.

Bypass

- Bypass is a complex issue and there is significant disagreement concerning whether or not bypass is a serious problem.

- The method used to charge long distance companies for access to local telephone networks can have an impact on the extent to which bypass occurs.
- The most prevalent form of bypass today is bypass of the local telephone company through the use of private lines provided by the local telephone companies themselves.

APPENDIX A

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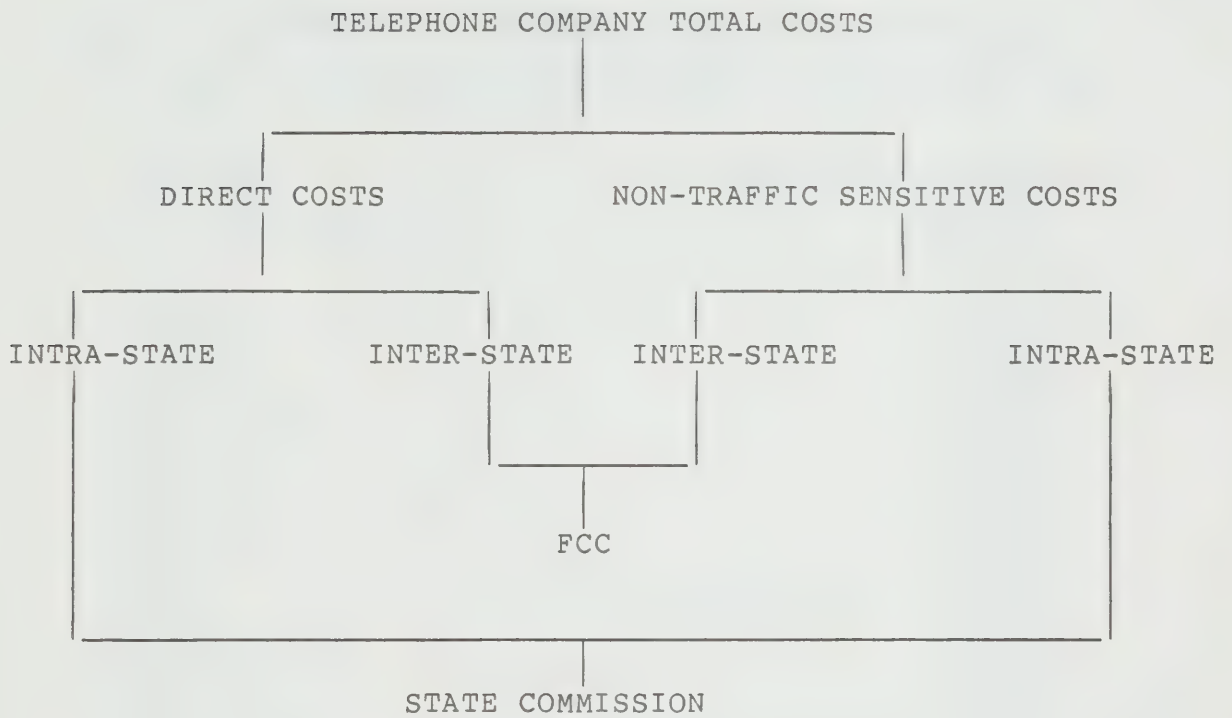
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APPENDIX B

JURISDICTIONAL DIVISION OF COSTS



APPENDIX C

PER CENT OF NTS COSTS ALLOCATED TO INTERSTATE FOR 1981

<u>LOCAL BELL COMPANY</u>	<u>PER CENT</u>
Alabama	20.8
Arizona	42.6
Arkansas	28.8
California	24.0
Colorado	42.2
Connecticut	33.4
Delaware	34.0
District of Columbia	41.9
Florida	36.2
Georgia	28.5
Idaho-Mountain Bell	35.3
Idaho-Pacific Northwest Bell	37.8
Illinois	26.4
Indiana	23.1
Iowa	28.2
Kansas	29.8
Kentucky-South Central Bell	20.3
Kentucky-Cincinnati Bell	13.0
Louisiana	19.9
Maine	29.9
Maryland	21.1
Massachusetts	27.5

APPENDIX C
(cont'd)

PER CENT OF NTS COSTS ALLOCATED TO INTERSTATE FOR 1981

<u>LOCAL BELL COMPANY</u>	<u>PER CENT</u>
Michigan	16.9
Minnesota	26.6
Mississippi	25.0
Missouri	26.3
Montana	44.5
Nebraska	36.9
Nevada	62.1
New Hampshire	43.0
New Jersey	31.5
New Mexico	36.0
New York	27.4
North Carolina	24.1
North Dakota	32.4
Ohio-Ohio Bell	19.0
Ohio-Cincinnati	18.7
Oklahoma	31.8
Oregon	32.8
Pennsylvania	21.1
Rhode Island	28.4
South Carolina	22.0
South Dakota	36.2
Tennessee	22.2

APPENDIX C
(cont'd)

PER CENT OF NTS COSTS ALLOCATED TO INTERSTATE FOR 1981

<u>LOCAL BELL COMPANY</u>	<u>PER CENT</u>
Texas-Southwestern Bell	22.6
Texas-Mountain Bell	33.0
Utah	31.4
Vermont	43.9
Virginia	26.7
Washington	30.1
West Virginia	21.5
Wisconsin	21.7
Wyoming	56.5
System Average	26.0

SOURCE: Federal Communications Commission, Common Carrier
Docket No. 78-72, Phase 1; Comments of the Bell
Operating Companies (August 6, 1982).

APPENDIX D

RECOVERY METHODS FOR NON-TRAFFIC SENSITIVE COSTS

INTRA-STATE
NTS COSTS

NTS COSTS ADDED TO DIRECT COSTS

INTRA-STATE LONG DISTANCE PRICED TO
PROVIDE CONTRIBUTION TO NTS COSTS.
LOCAL SERVICES PRICED TO RECOVER THE
REMAINING COSTS

INTER-STATE
NTS COSTS

PRIOR TO
APRIL, 1979

1. NTS COSTS ADDED TO DIRECT COSTS.
AT&T SERVICES PRICED TO RECOVER
TOTAL. LOCAL TELCOS RECEIVED PAYMENT
FOR NTS COSTS ALLOCATED TO INTER-STATE
FROM AT&T.

APRIL, 1979

2. ENFIA TARIFFS FOR OCC's. 70 PER CENT
DISCOUNT COMPARED TO AT&T PAYMENTS.
PLUS PAYMENTS AS ABOVE FROM AT&T.

MAY, 1984

3. COMBINATION OF CUSTOMER ACCESS CHARGES
AND CARRIER ACCESS CHARGES (WITH A 55
PER CENT DISCOUNT ON CARRIER CHARGES
FOR OCC's). THIS IS THE CURRENT
METHOD.

FUTURE?

4. CUSTOMER ACCESS CHARGES. THIS IS
METHOD PREFERRED BY THE FCC.

